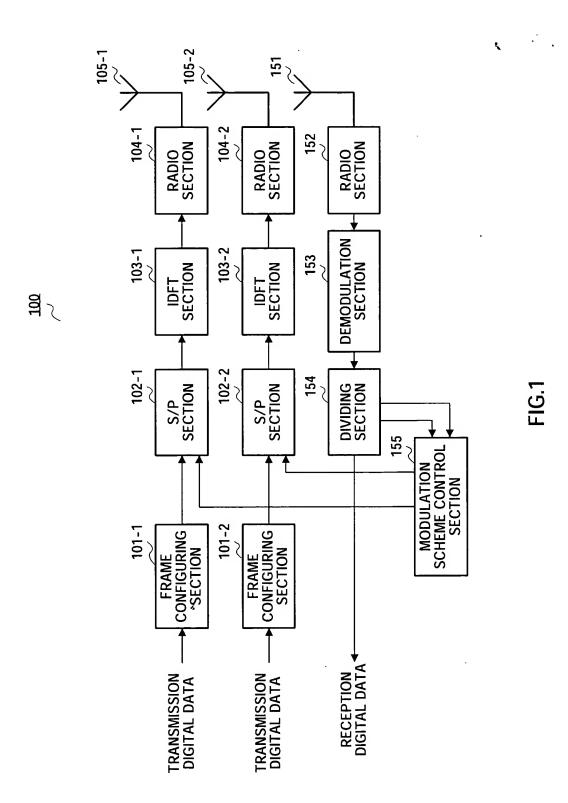
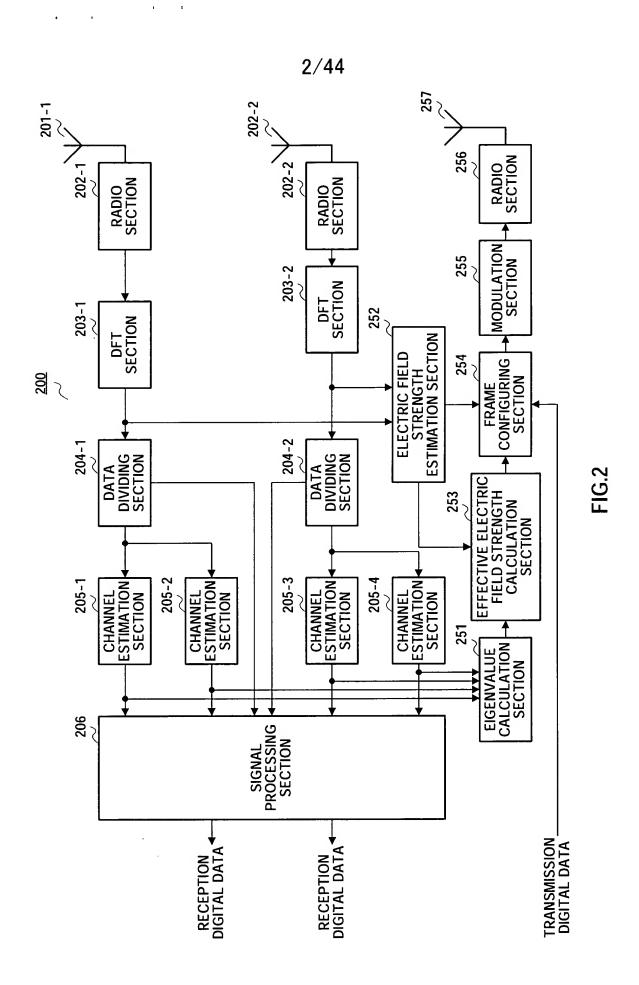
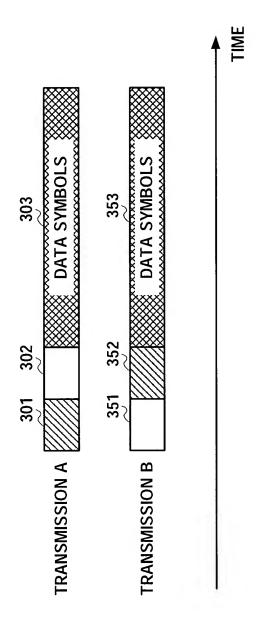
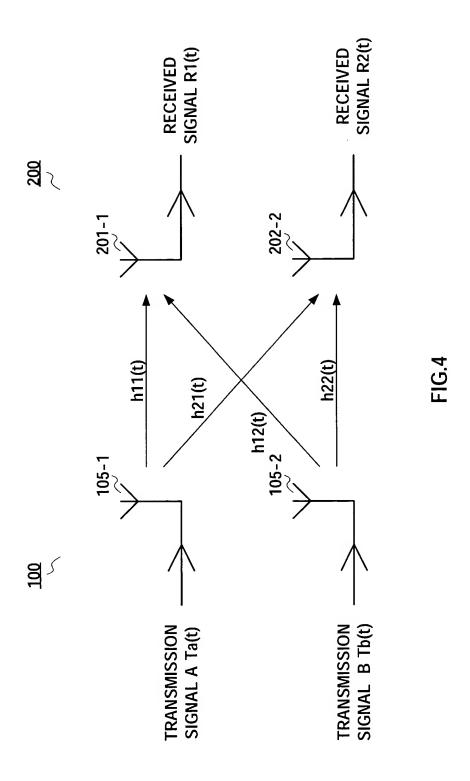
<u>,</u>': ;

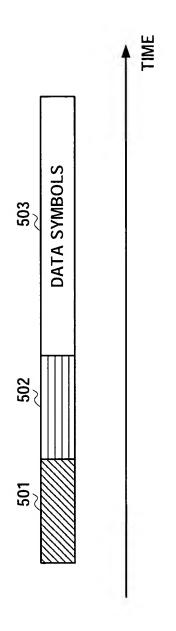




, 11 ...







	MODULATION SCHEME
0≦X <th1< td=""><td>16QAM</td></th1<>	16QAM
TH1≦X <th2< td=""><td>QPSK</td></th2<>	QPSK
TH2≦X	BPSK

New York

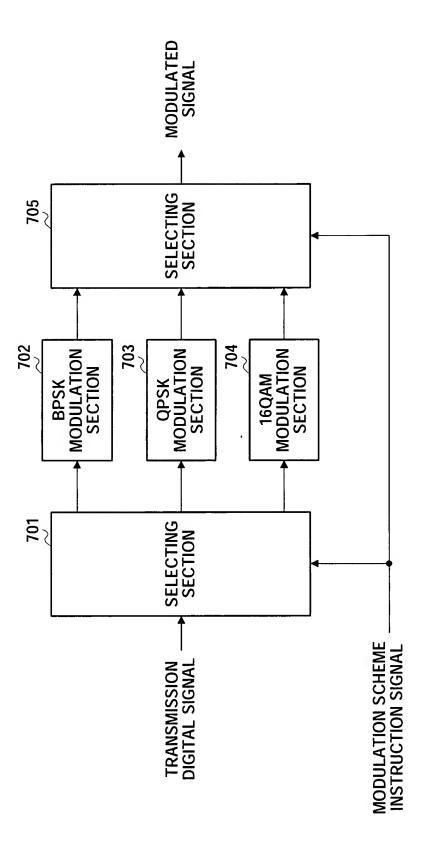


FIG.7

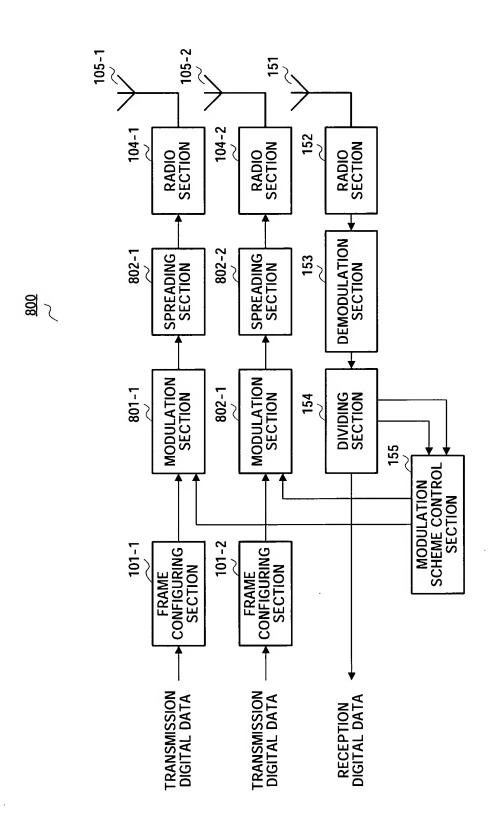
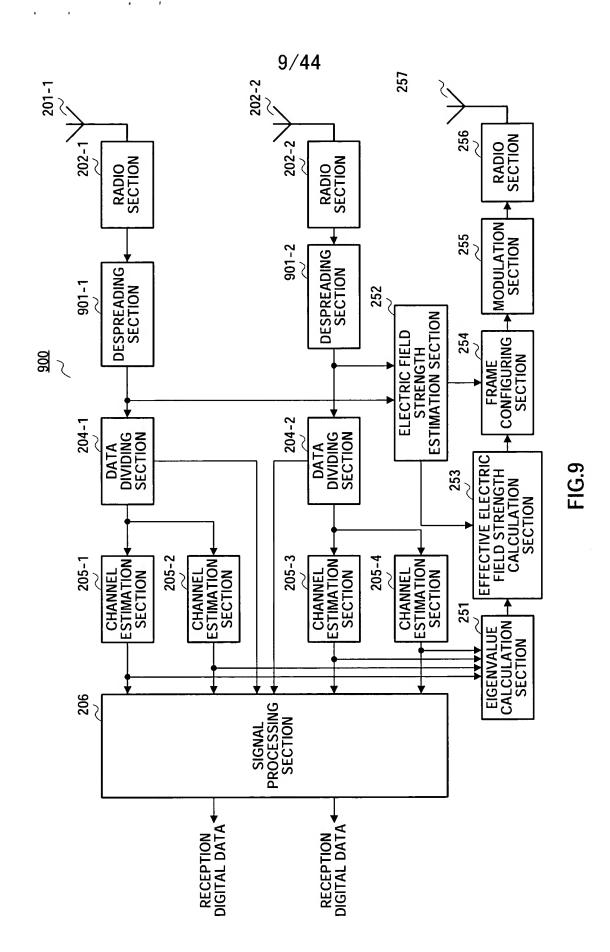
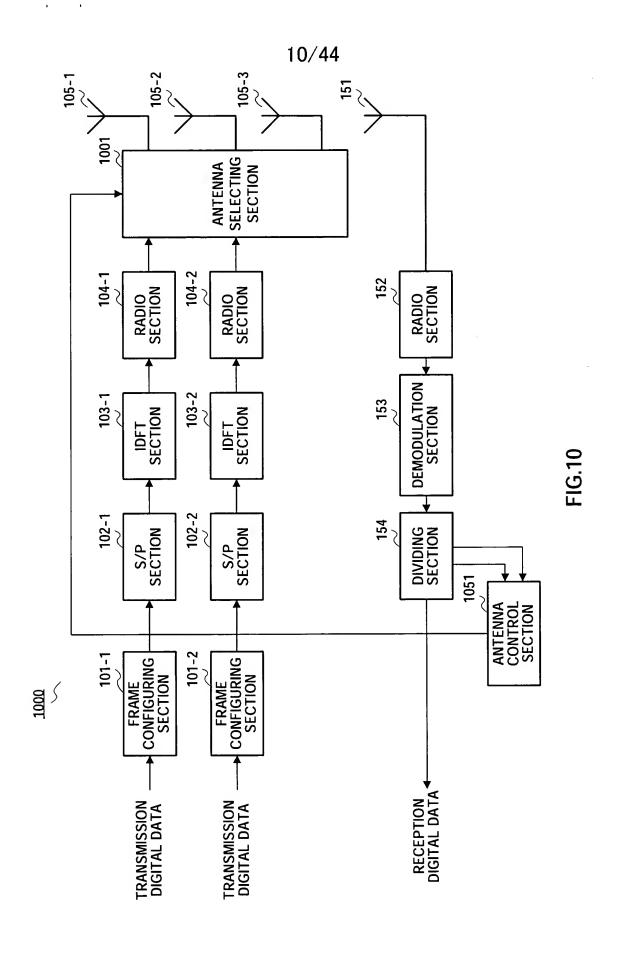
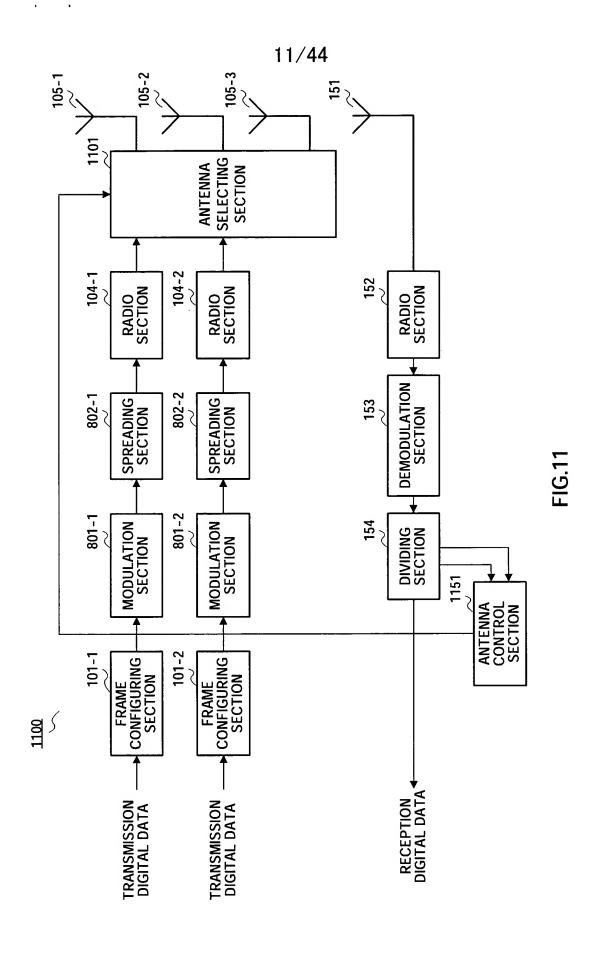
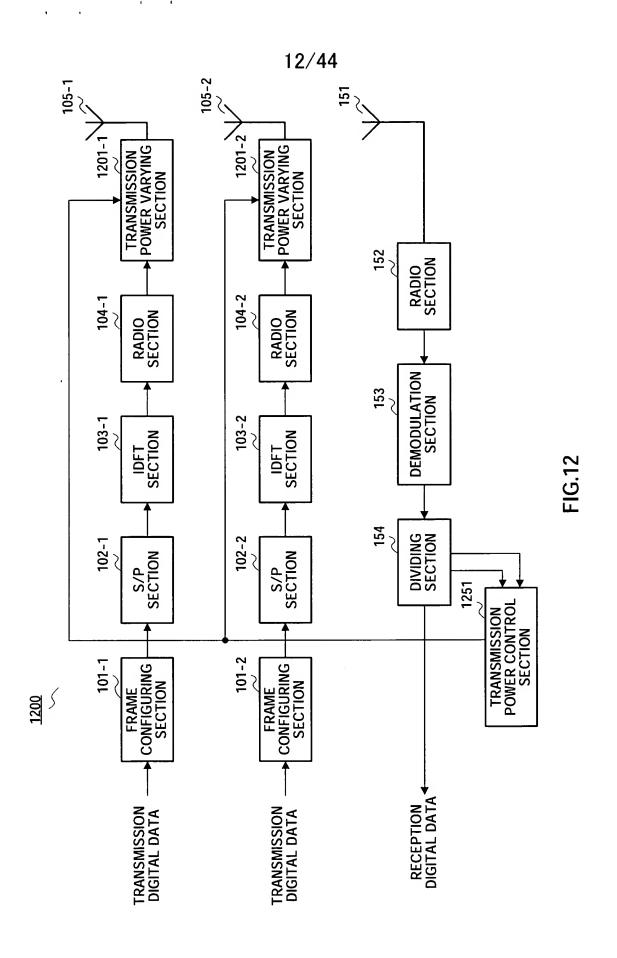


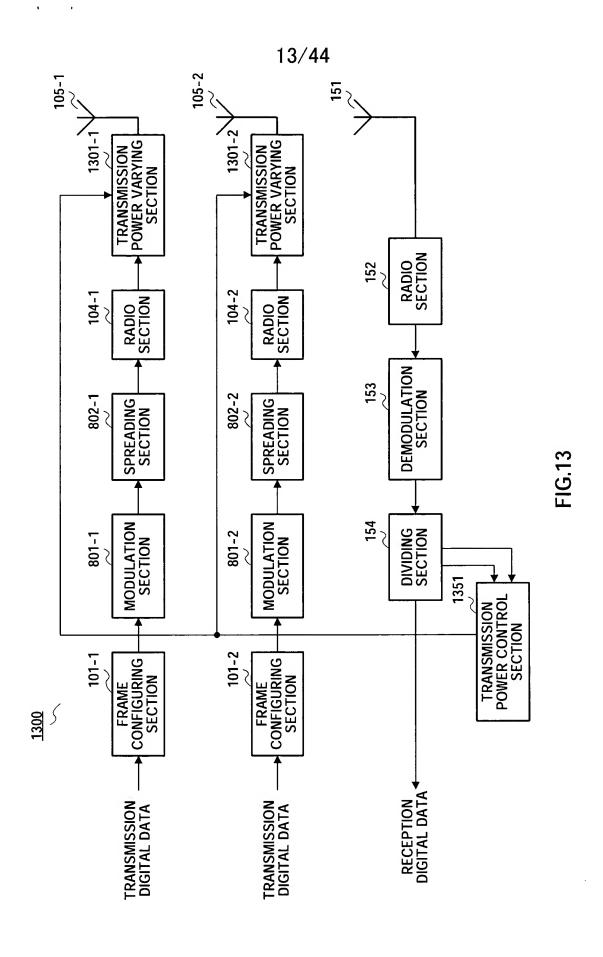
FIG.8

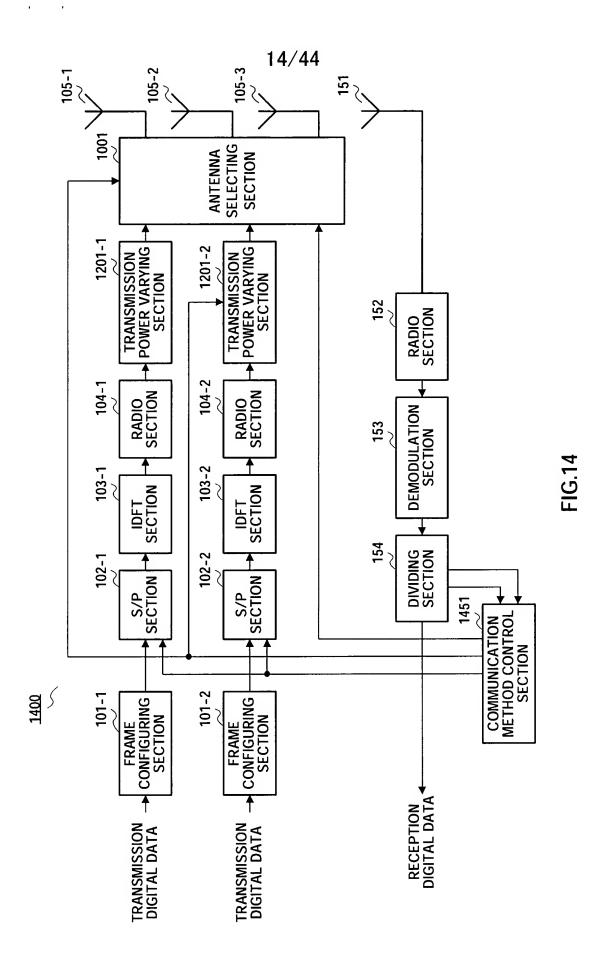


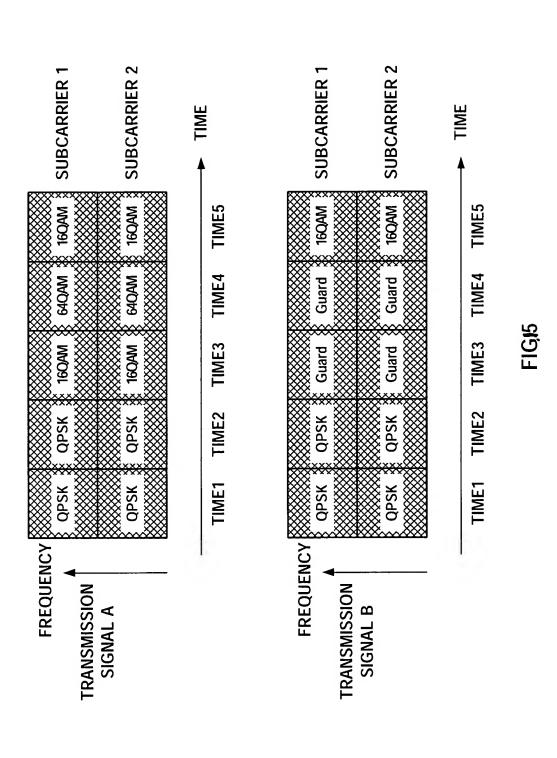




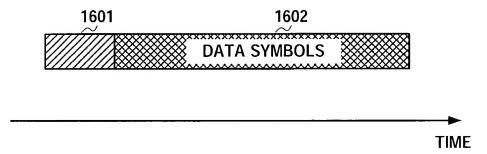


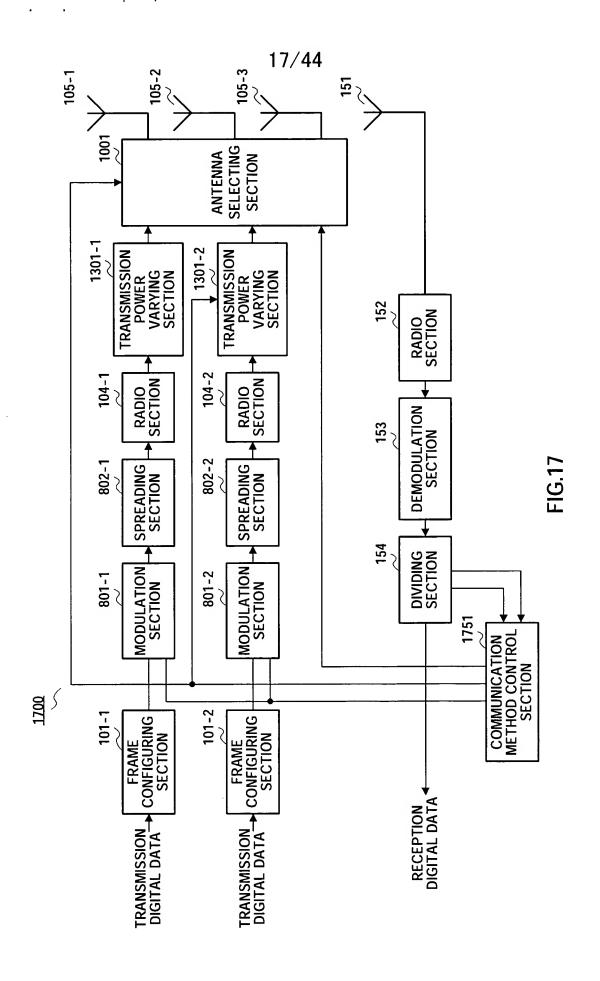






16/44





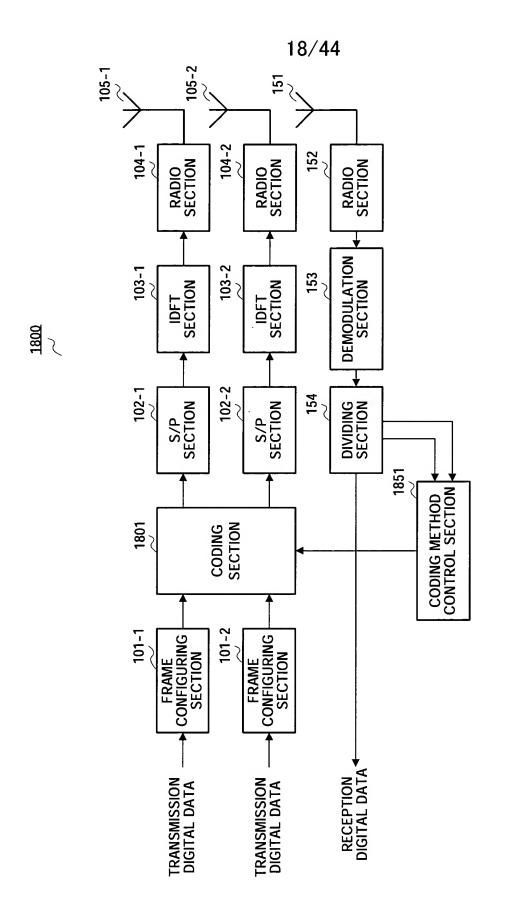


FIG.18

19/44

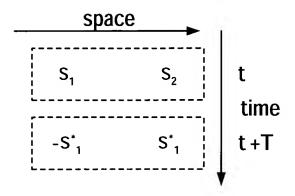
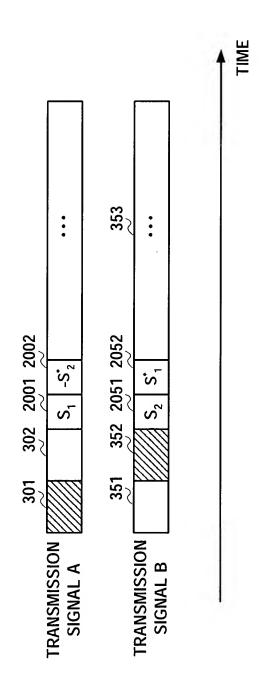
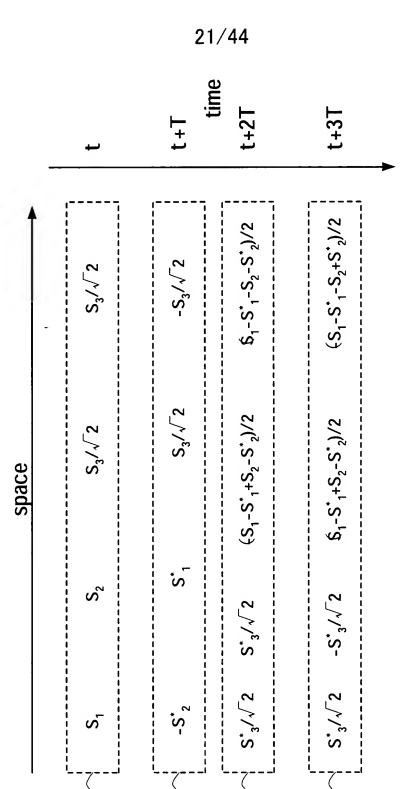


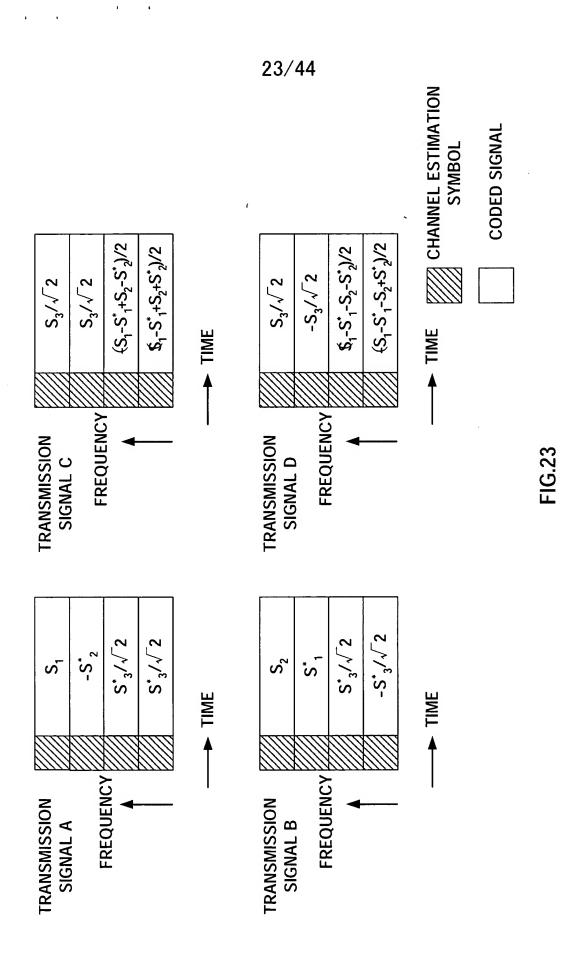
FIG.19



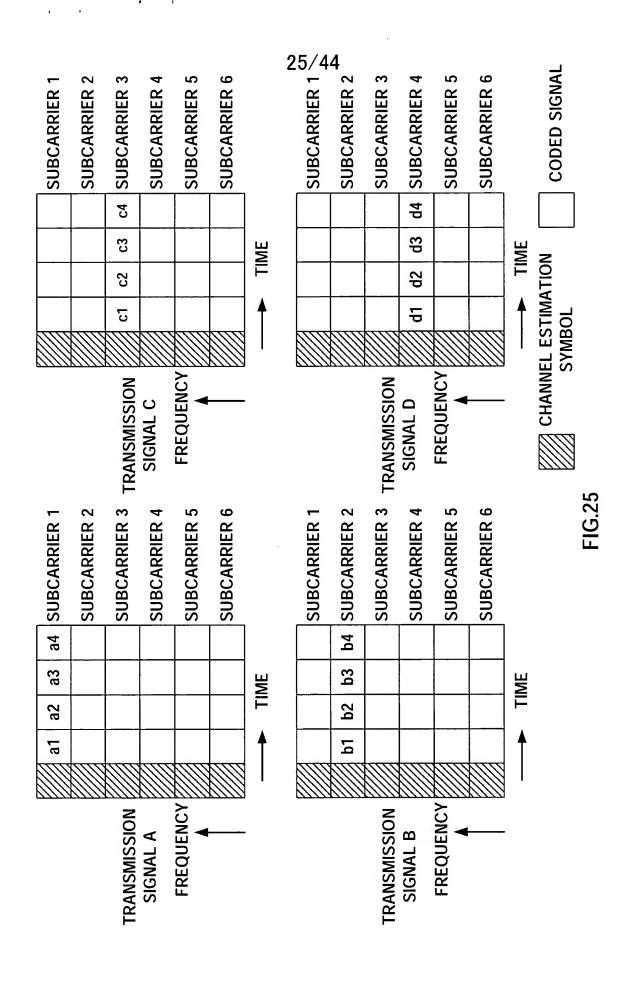


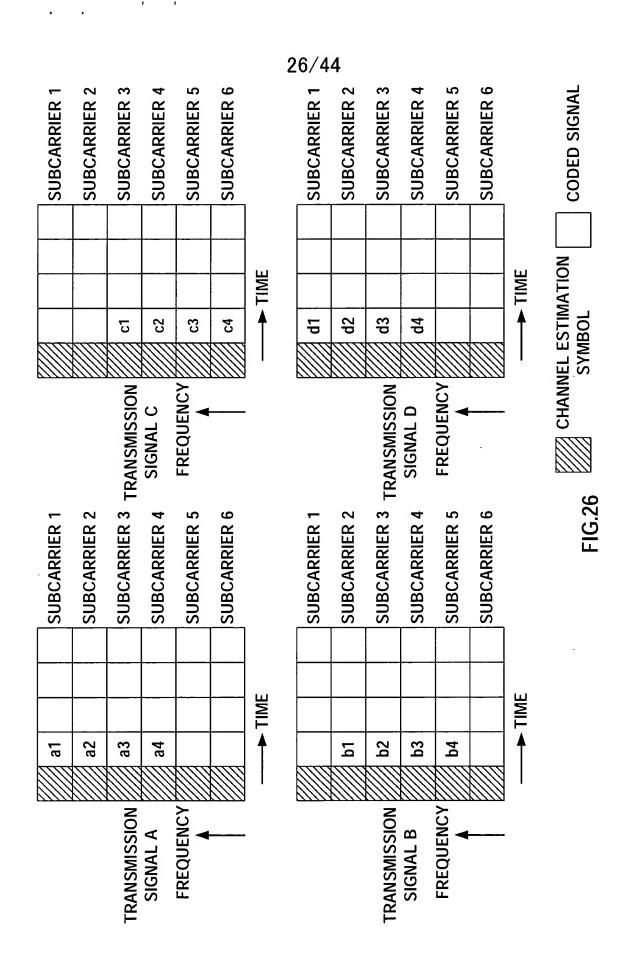
				22/	/44			1.1
2203-4	$S_3^*/\sqrt{2}$	2223-4	-S* <sub>3</sub> /√2	2243-4	\$1-5,1+52+5,2/2	2263-4 5	$(S_1-S_1-S_2+S_2)/2$	TIME
2203-3	S* <sub>3</sub> /√2	2223-3	S*3/√2	2243-3	(S <sub>1</sub> -S <sub>1</sub> +S <sub>2</sub> -S <sub>2</sub> )/2	2263-3	\$1-5,1-5-5,1/2	
2203-2	-S <sup>2</sup>	2223-2	S <sub>1</sub>	2243-2	S <sub>3</sub> /√2	2263-2	-S <sub>3</sub> /√2	
2203-1	S	2223-1 >	S <sub>2</sub>	2243-1 >	S <sub>3</sub> /√2	2263-1 >	S <sub>3</sub> /√2	
$\begin{array}{c} 2202 - 1 & 2202 - 3 \\ 2201 & \left< 2202 - 2 \right< \\ \left< 3201 & \left< 3202 - 2 \right< \\ \left< 3202 - 2 \right> \end{array}$		2222 1 2222-3 2222-1 2222-2 (		2242-2 2242-3 2241-1( 2241 (		$\begin{array}{c} 2262-2 & 2261 \\ 2261-1 \left(\begin{array}{c} 2262-3 \\ \end{array}\right) \end{array}$		
	TRANSMISSION SIGNAL A	,,	TRANSMISSION SIGNAL B	, ,	TRANSMISSION SIGNAL C	, ,	TRANSMISSION SIGNAL D	

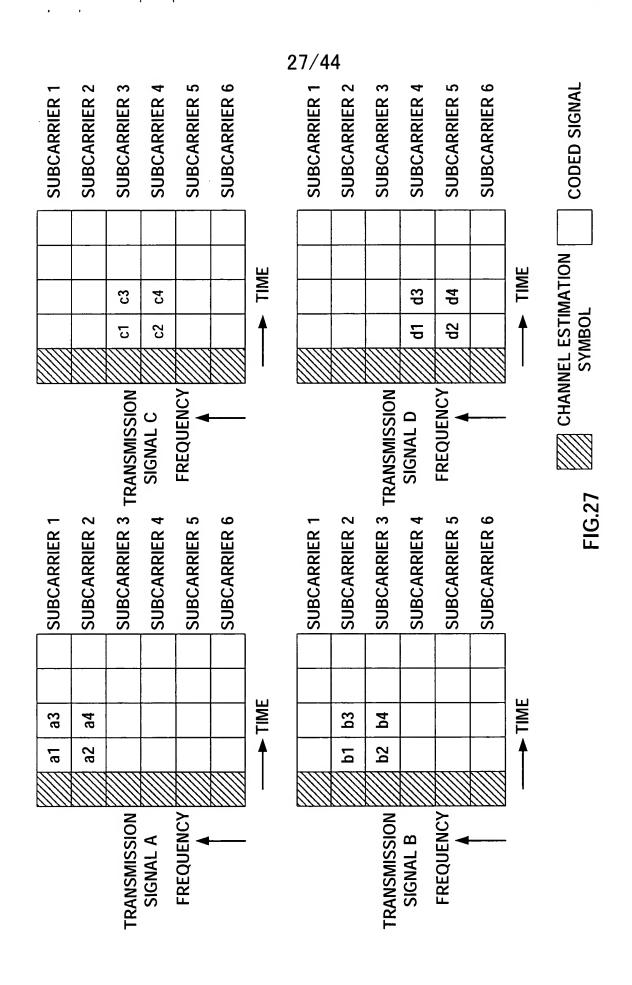
**FIG.22** 

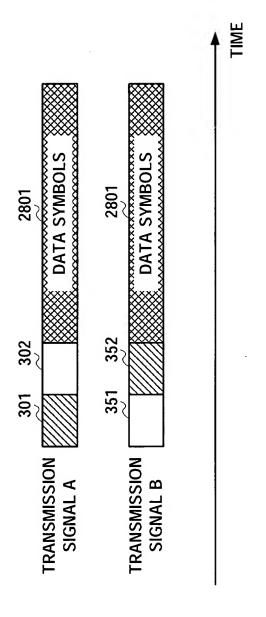


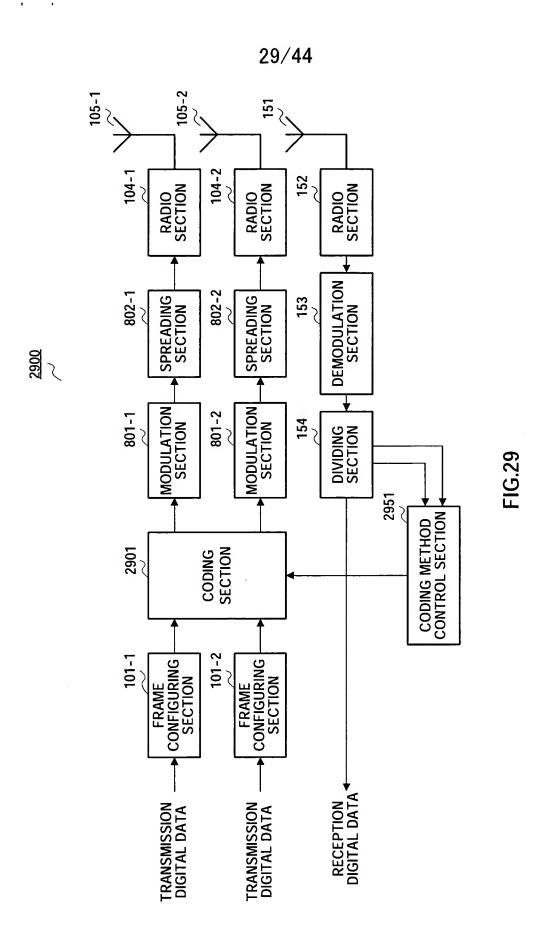
				CHANNEL ESTIMATION SYMBOL CODED SIGNAL
S*3/√2 S*3/√2	S*3/√2 -S*3/√2	(S <sub>1</sub> -S <sub>1</sub> +S <sub>2</sub> -S <sub>2</sub> )/2	\$ <sub>1</sub> -S <sub>1</sub> -S <sub>2</sub> -S <sub>2</sub> )/2 (S <sub>1</sub> -S <sub>1</sub> -S <sub>2</sub> +S <sub>2</sub> )/2	
S <sub>1</sub> -S <sub>2</sub>	S <sub>2</sub> S <sup>1</sup> TIME	$S_3/\sqrt{2}$ $S_3/\sqrt{2}$	S <sub>3</sub> /√2 -S <sub>3</sub> /√2	- TIME FIG.24
FREQUENCY	FREQUENCY	FREQUENCY	FREQUENCY	<b>↑</b>
TRANSMISSION SIGNAL A	TRANSMISSION SIGNAL B	TRANSMISSION SIGNAL C	TRANSMISSION SIGNAL D	











4 ه

30/44

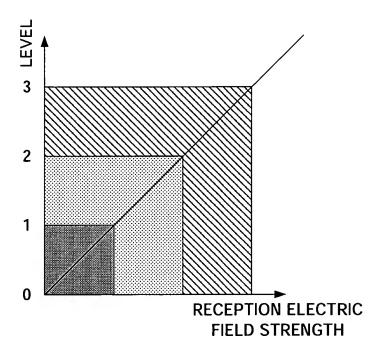
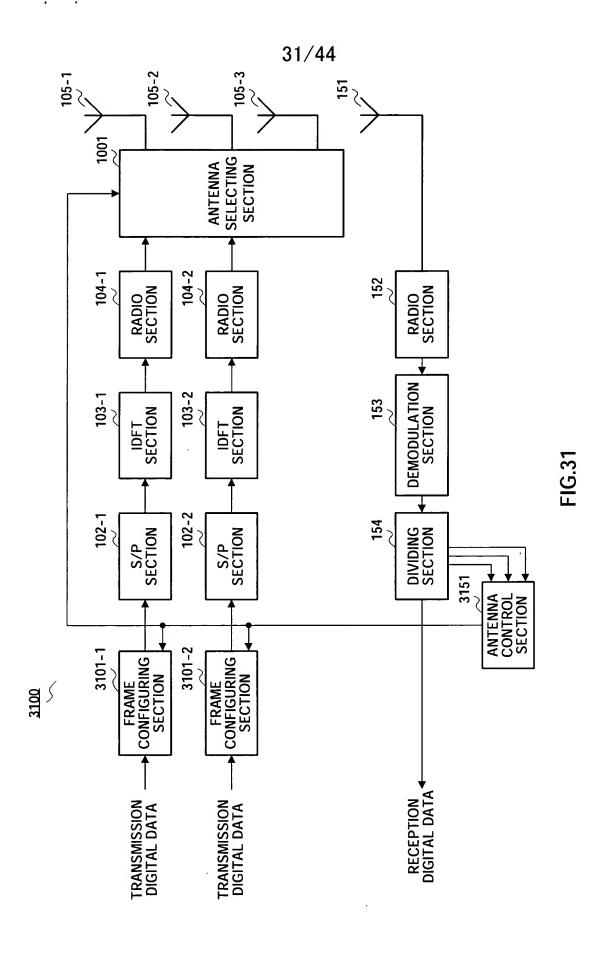
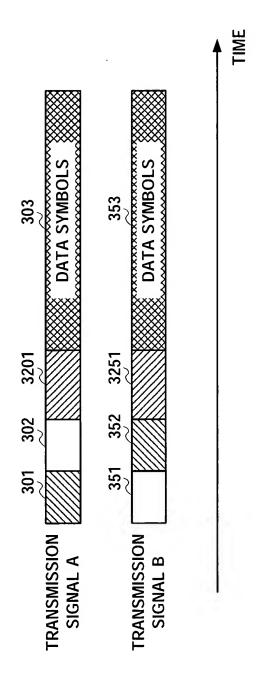
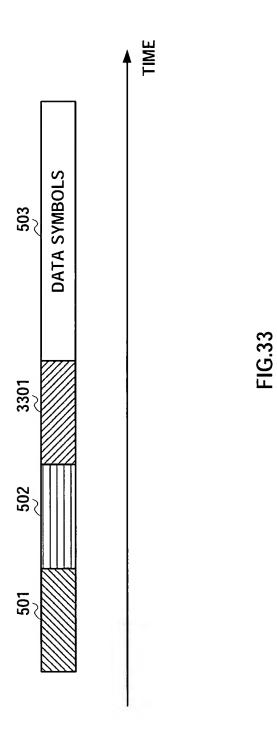


FIG.30







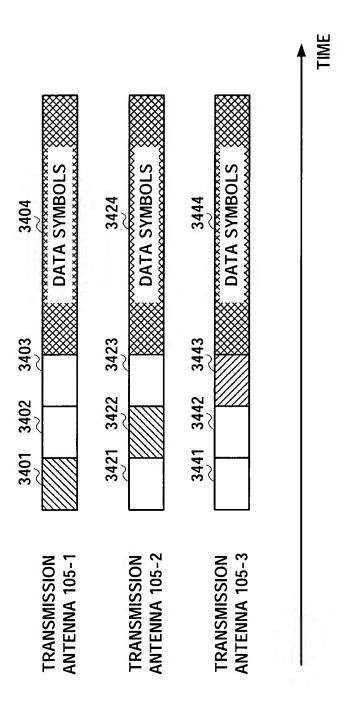


FIG.34

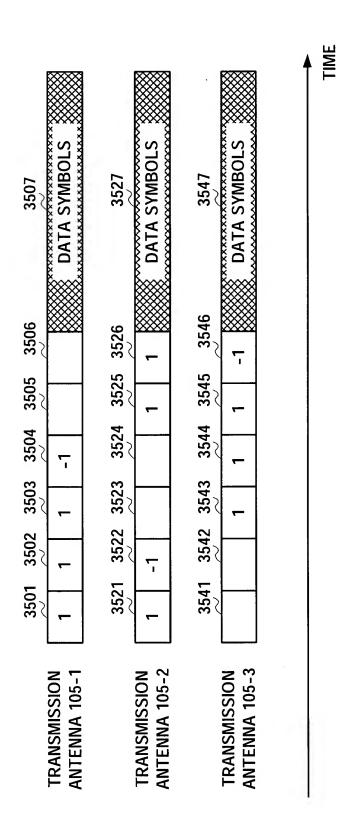
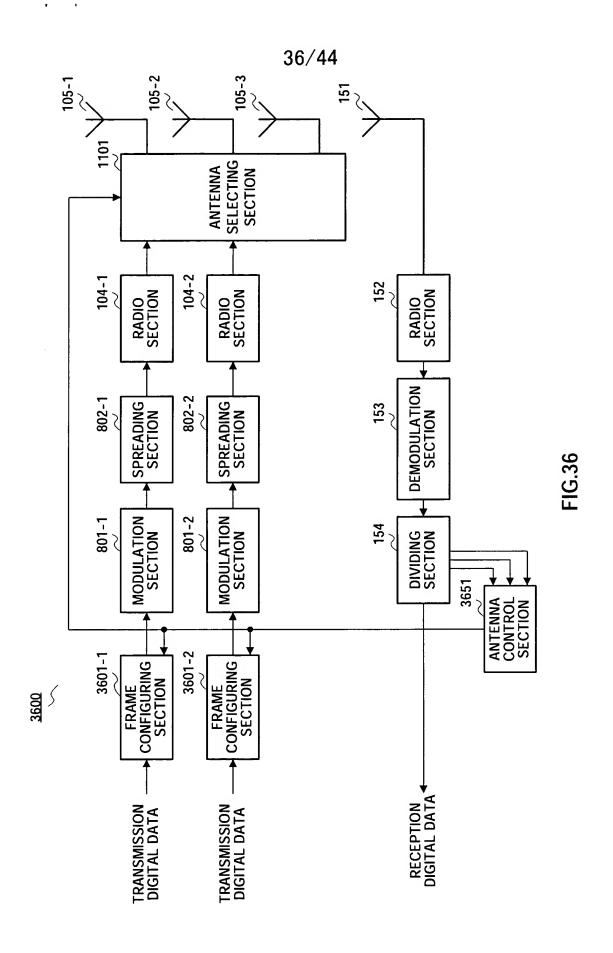


FIG.35



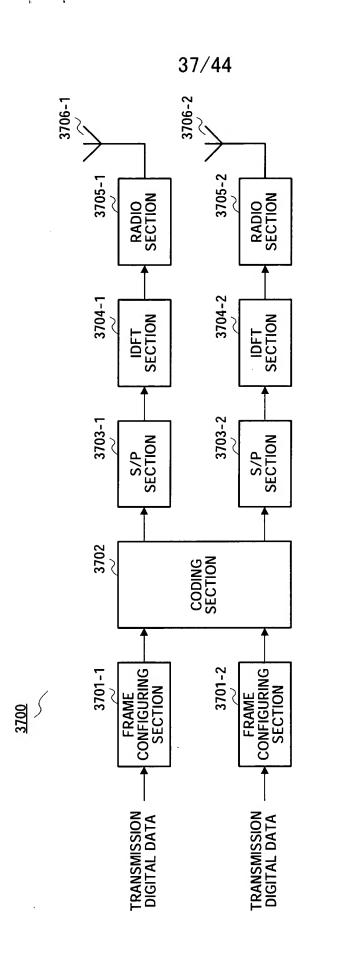
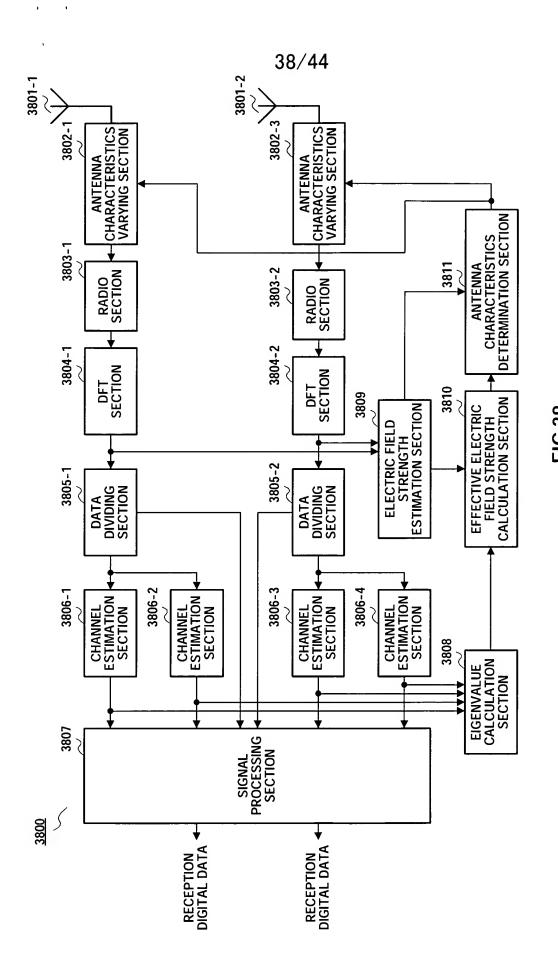


FIG.37



. 4

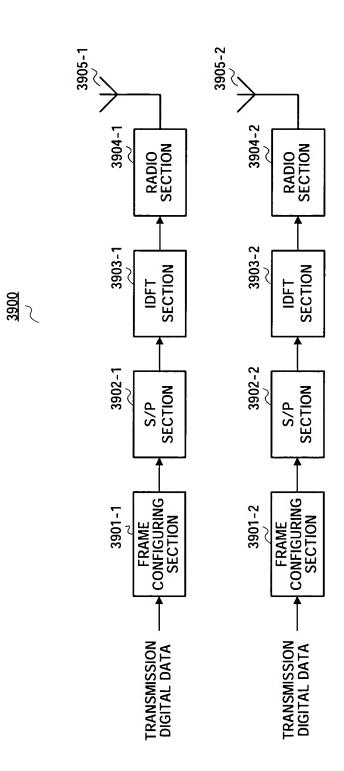


FIG.39

